Tire Derived Aggregate

Tire derived aggregate (TDA), which is made from shredded tires and is used for multiple public works projects, provides the second largest reuse of tires in the United States.

With California using approximately four to six million tires per year, and increased use anticipated, TDA plays a major role in providing a solution to diverting California's scrap tires from landfills.

Good for the Bottom Line

TDA can save your jurisdiction money. TDA can save as much as 50 percent over conventional lightweight aggregate. It also provides a cost-effective solution to drainage problems, vibration mitigation in light rail projects and landslide repairs.

Good for the Community

Tire derived aggregate has many benefits. It is an excellent alternative to conventional lightweight backfills, is long lasting, absorbs vibration and is free draining.

Tire derived aggregate has multiple uses. It can be used behind retaining walls as a lightweight backfill, as vibration mitigation in light rail projects, and in landfills as a gas collection system and drainage layer. TDA is also being used to overcome road building challenges posed by weak foundation soils due to its durability and light weight.

Good for the Environment

TDA helps reduce the amount of tires entering our landfills. TDA is a versatile product that can provide not only California, but the U.S., with a useful and cost-effective alternative for scrap tires.

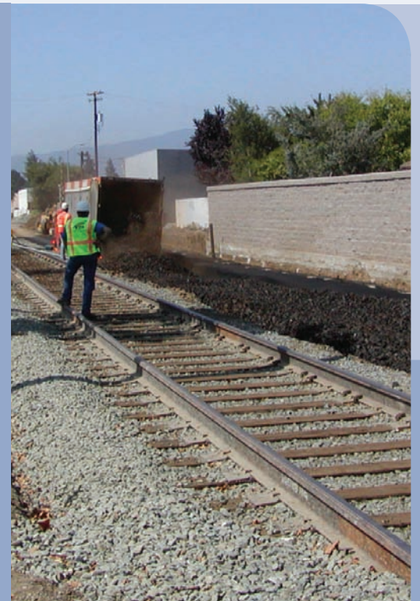
Success Stories

As part of its continuing effort to help develop and promote cost-effective markets for scrap tires, the CIWMB entered into an interagency agreement with Caltrans to help build the new Highway 880/Dixon Landing interchange.

In this project, Caltrans used tire derived aggregate to construct a freeway on-ramp embankment. This project used 660,000 scrap tires and resulted in a $240,000 savings for California.

In another joint project, Caltrans used tire shreds made from 80,000 waste tires as backfill behind a 200-foot section of retaining wall in the City of Riverside.

The pilot project demonstrates that tire shreds exert less pressure on a retaining wall than conventional gravel or soil. This new retaining wall design, which contains less steel than a standard wall, is more cost-effective.



"On the Dixon Landing interchange project, Caltrans needed lightweight embankment fill because of weak Bay Mud. TDA saved Caltrans nearly $250,000 over the next cheapest alternative. Moreover, the project used over 600,000 tires – a win for everyone."

— Dana N. Humphrey, Ph.D., P.E.
Professor of Civil Engineering, University of Maine
Engineering Consultant to the Dixon Landing Project

Contact Information

To learn more about how your jurisdiction can benefit from TDA, visit www.ciwmb.ca.gov or call (916) 341-6441.